Home Computing WEEKLY
An Argus Specialist Publication
No. 80
Sept 18-24, 1984
45p

Every week: your best buy for software reviews and hardware

Reviews and even more reviews...

Four pages of software reviewed for: Spectrum, CBM 64, BBC, Electron, VIC-20, TI-99/4A

Tell us what you think in the HCW readers' survey – you could win a great prize

Design and draw: Graphics utility for your Dragon

Find your way home with our Spectrum program

VIC-20 program – Wall Street crash or cash?

Plus: news, your letters, charts, U.S. Scene...

Micro widows

Research is being undertaken into what could become a social problem of the 80's. You've heard of the golf widow and the cricket widow — now here's the micro widow.

The problem is addiction to computers, which gives rise to antisocial behaviour. Take the example of the working man who comes home at night, grabs a bite to eat and then holes himself in with his home computer until four o'clock in the morning. His wife and children barely see him and he prefers to work or play with the computer than do anything else.

Continued on page 5

Currys steps in

Curry is moving into the home computer market in a big way. After spending 18 months preparing for a major national launch, Currys aims to increase its share of the home computer market from the current 1½-2½ per cent to 9 per cent by the end of December 1984.

Simon Williams, marketing director, said "Our company philosophy is to try and test before entering a market. We have been testing the waters in Wales and Scotland and are now ready for the launch."

Currys will be stocking six computers in most major stores: the 48K Spectrum, Commodore C16 and CBM 64, Electron, BBC and Toshiba's MSX, the HX-10. The QL will also be sold in Currys' top five or six stores.

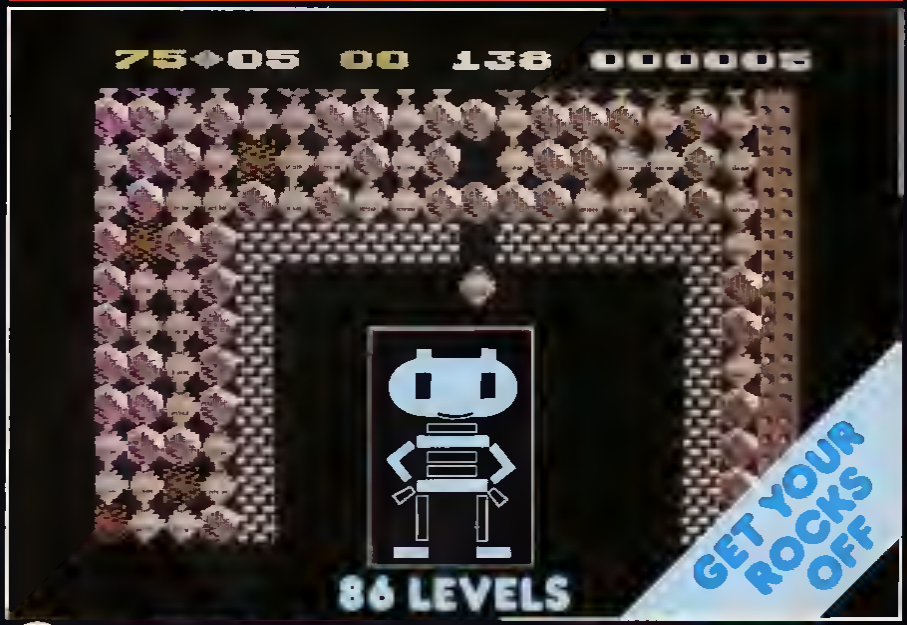
Justifying these choices, Mr Williams explained "We have quite good stock availability of the Spectrum and the starter pack is encouraging sales, which went up by 25 per cent during the first week of the promotion.

"The C16 is due the last week of September, and it's an ideal starter to replace the VIC 20. Commodore are backing it with heavy advertising. The CBM 64 takes us into the small business market.

Continued on page 5

BIGGER, BOULDER, More BEAUTIFUL

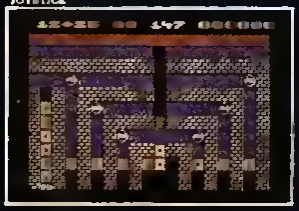
AMERICAN NO 1.

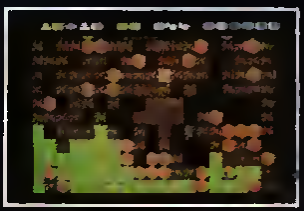


JOYSTICK

BOULDER dash

commodore 64





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SOFTWARE REVIEWS

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Readers: we welcome your programs, articles and tips

Software houses: send your software for review to the editor at the address below. And contact him for competitions and other promotions too

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Argus Specialist Publications Ltd.
No 1 Golden Square, London W1R 3AB 01-437 0626

Home Computing Weekly is published on Tuesdays. Subscriptions and back issues: Infonet Ltd, 10-13 Times House, 179 Marlowes, Hemel Hempstead, Herts HP1 1BB. 0442 48432. Trade distribution: Argus Press Sales and Distribution Ltd, 12-14 Paul Street, London EC2A 4JS. 01-247 8233. Printed by Alabaster Passmore & Sons, Ltd, of London and Maidstone, Kent. Design and origination: MM Design, Circus House, 26 Little Portland Street, London W1N 5AF.

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Currys

From front page

"The Electron will go to most stores, and the BBC is still a good seller. Its' starter pack provides added value"

Currys will be the first to have the HX-10, according to Simon Williams. "We'll be 10 days ahead of any other retailer," he said. "It will be in the shops on September 20" However, he doesn't anticipate selling the HX-10 in great volume before Christmas.

Peripherals will become an increasingly important asea, and will be stocked in all stores Currys realize the importance of stocking up-to-date software and is using Websters as its distributor.

"It's very important to offer the full range of software available," said Ralph Armond, responsible for the home computer operation. "It's always very difficult to organize through warehouses, which are slow and inflexible. We've chosen Websters and we'll be their second largest client. We're assured a very quick change of stock"

The top 150 stores will have merchandising operation and others will have starter packs, bended together.

Currys plans to spend £½ million promoting its launch and will be inserting catalogues in the Radio Times. The possibilty of TV coverage has not yet been finalized.

Currys has pledged its commitment to training. At least one member of staff from every branch has participated in a two-day course at Currys staff training centre. "Our staff already have a lack of technofear," said Simon Williams. "They're used to selling appliances with plugs on" Currys aims to avoid baffling clients with jargon, while providing the guidance and help necessary.

Widows

From front page

Margaret Shotton of Loughborough University Department of Human Sciences is researching for a PhD on the psychological and social effects of excessive computer usage.

"It's a subject which has fascinated me for a number of years," she said. "This is a problem which is causing great distress in families in some cases. Wives sometimes find themselves forced to issue ultimatums — either it's the computer or me. It can be a worse problem than for golf widows, since the computer is always there"

Ms Shotton is in the initial stages of her research and so far has studied 100 adults — of whom only four are women — and is now looking for children and women to study. It's a problem for which she has a great deal of sympathy, and she is unhappy about the sensational press coverage she has received so far.

"This problem may affect only one per cent of all micro users," she said. "However, if you take the estimate of 2 million home computer users in Britain, that's still a sizeable amount. What's more, it's a problem which is very real for the family of the individual concerned"

With 100 computer users studied, it is too early to establish a pattern of behaviour. Why do some enthusiasts devote themselves so entirely to their computer that other aspects of their life suffer? This is something which is still to be ascertained — and you could help.

If you have relatives or friends who spend a disproportionate time in front of their computer, and they will agree to help Margaret Shotton with her study, then contact her. Each case will be handled in confidence and Ms Shotton will be grateful for any help towards establishing the cause and effects of this new social problem.

Margaret Shotton, Department of Human Sciences, Loughborough, Leics LE11 3TU

UK chess contest

Make your Move is the name of the computerised chess championship which Acorn, together with Ceefax, is sponsoring for UK primary school children. In the final stages contestants will be competing from their own schools on BBC micros, linked by direct telephone line to the Ceefax Computer Centre in London. And if you're a chess enthusiast interested in spectating, you'll be able to watch on Ceefax.

Regional heats will take place in October, and around 26,000 schools have been invited to take part. Contestants will be whittled down to eight regional winners for the national final which is to take place in January.

The first prize is a complete BBC system for the winner's school, including monitor, cassette recorder and teletext adaptor. The second prize-winner will receive a BBC B for his or her school, and six finalists will take home a teletext adaptor or cash equivalent. All finalists will be able to keep an engraved chess clock for themselves.

Competition entries must be submitted by Wednesday 17 October, and can be obtained from: KWJ Tonkin, 21 Rumbold Lane, Wansfleet All Saints, Skegness, Lincs.

William Hartston, International master, supervises chess on the BBC

Spine chilling

Mastertronic recently launched the latest in its range of low-cost software, Chiller. The press launch took place at London's Peppermint Park, where journalists were treated to a display of dancing by a Michael Jackson look-alike.

Inspired by the Michael Jackson record Thriller, the game is part of the so-called second generation of Mastertronics games. Martin Alper, Mastertronic managing director, said: "This game should convince the industry once and for all that we can publish a quite exceptional program and still keep the price at £1 99"

Chiller was written by David and Richard Darling and features five different screens. The game involves a journey through a forest, cinema, ghetto, graveyard and mansion and your task is to rescue your girlfriend who is being held captive. Ghouls, zombies, ghosts and bats threaten you.

Mastertronic, Park Lorne, 111 Park Rd, London NW8 7JL

Well done!

There were ten titles concealed in our Dk'tronics wordsquare. They were Jawz, Diet, Proteans, Apple Jam, Trom, Speed Duel, Slicker Puzzle, Road Toad, Astron and Who Dares Wins.

Here are the names of the ten first prize winners, who will each receive a Spectrum keyboard: D J Schofield Liverpool P Shepherd Nottingham Michael Clarke Consett Co Durham A C Williamson, Brighton C Butterworth Halifax K Gingell Cwmbran N Sheikh Mueidat Thomas Allan Barr Aberdeen Gerald Maelun Leeds Steve Adnan London.

The forty runners-up, who win two Dk'tronics games, are: F Ashley Birmingham Kevin Satchell Sawston Peter Van Allen Weymouth Richard Wright Richmond J K Tas Edgware Mark Graham Congleton K R Lailett Wembley A Loge-Campbell Cheltenham O Tew N Finchley Lars Jensen Dalmose Denmark John Owens Luton M A Casey Derby Andrew J Hutchinson, Southampton L S Golden Cowbridge Paul Hinde Wirral P Fairhurst Stockport P M Lovelock Chelmsford Jeffrey MacDonald Mid Lothian E Oates Blyth F A Bode Hanford C Bond Walton A Sagar Stockport Richard Green Norwich Robin Davies Redruth K Langley Heywood D Kinsella, Manchester David Tomblin Rhyl S R Blackshaw Liversdee, David Ayres Stoke H Collings Aldershot B G Mitchell Basingstoke, Paul Hudson Milton Keynes P M Williams Ebbw Vale Nigel McGee Nottingham M A Burns Sutton M E Taylor Birmingham T Quinton Horsham Richard Brunton Redruth S Brodie Hull Lynne Turner Hull.

Atlantis is Intrigue's new game for the Texas. "A fully animated arcade adventure", is how Intrigue describes it. It has more than 80 different scenes and the first person to discover the secret of Atlantis will win £50. Price £6.95.

Intrigue, Cranbrook Rd, Tenterden, Kent TN30 6UJ

Good news for all Memotech users. Level 9 Computing has converted Colossal Adventure, Adventure Quest, Dungeon Adventure, Snowball and Lords of Time for the Memotech. All games will cost £9.90.

Level 9 Computing, 229 Hughenden Rd, High Wycombe, Bucks

Win a prize in the HCW survey

Tell us what you think of HCW — it's your view that counts

Here's your chance to give us your views on HCW and at the same time we're giving you the opportunity to win prize software or books for your computer.

This week, instead of our usual competition we're including a questionnaire all about you, your computer and Home Computing Weekly. We want to know all about our readers and what they expect from us. The senders of the first 25 questionnaires received will each win software or books as prizes.

All we want you to do is fill in the questionnaire on this page. Just tell us who you are, what sort of computer you own and so on. There's also a section about HCW in which you can give your views on the magazine. Write down what your favourite HCW features are – it could be the reviews, the charts or anything. It's entirely up to you.

We also want to know if there's anything that you dislike about HCW. Maybe you think there aren't enough listings for your home computer — tell us, because that's the sort of information we need to find out. There's also a section where you can include your recommendations for improving HCW.

From this information we'll be able to discover what we're doing right (and wrong!) and so we'll know what improvements to make on the pages of your magazine.

So what are you waiting for? Simply fill in the form, mark your envelope HCW Survey and post it off in time to reach us by first post on Friday October 5, 1984. Remember that HCW is your magazine and we won't know what you think of it unless you tell us yourselves.

Name _____

Address _____

_____

_____

1. Are you male/female?

2. Age: under 10☐ 10-14☐ 15-19☐ 20-24☐ over 25☐

3. Which independent TV station do you watch?
LWT/Thames☐ TVS☐ TSW☐ Scottish☐ Granada☐
Yorkshire☐ Central☐ Harlech/HTV☐ Anglia☐
Tyne Tees☐ UTV☐ Channel☐

4. Which independent radio station do you receive? _____

5. Which computer do you use/own? _____ (make and model)

6. How long have you had your computer?
Less than 3 months☐ 6 months to 1 year☐ 1-2 years☐
more than 2 years☐

7. Are you likely to get another computer in the next few months? Yes/No

8. Do any other people use your computer? Yes/No
If yes, how many? _____

9. How much have you spent on add-ons in the last six months? _____

10. What did you buy? RAMpack☐ monitor☐
light pen☐ printer☐ joystick☐ printer/plotter☐
other (please state) _____

11. Which magazines do you buy?
Popular Computing Weekly ☐
Personal Computer News ☐
Any others _____ (please state)

12. How often do you buy them?
every week☐ occasionally☐ rarely☐

13. How often do you buy HCW?
every week☐ occasionally☐ rarely☐

14. How much do you spend on software in two months? _____

15. How often do you buy software? _____

16. What type of software do you buy? _____
adventure☐ utilities☐ small business☐
arcade☐ household☐ educational☐

17. Do you type in the listings in HCW? Yes/No

18. Do you read software reviews as a guide to buying Yes/No

19. Do you follow the charts? Yes/No

20. What do you like best about HCW? _____

_____

_____

21. What aspect of HCW would you most like to see altered?

_____

_____

22. What new features would you most like to see in HCW?

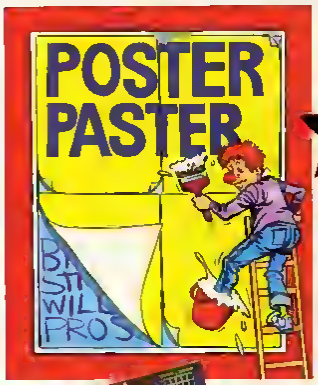
_____

_____

_____

Post your entry to HCW Survey, Home Computing Weekly, No 1 Golden Square, London W1R 3AB to reach us by first post on Friday October 5, 1984.

Taskset & commodore 64



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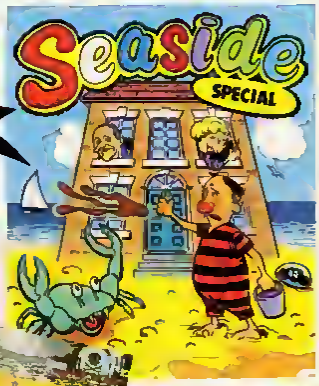

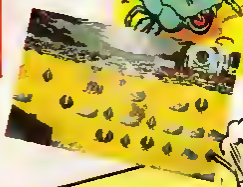

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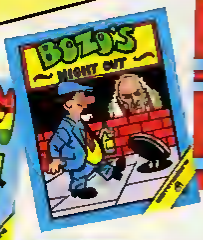

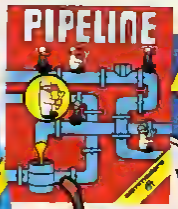

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4 Star Review HCW
[illegible] Software Today

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Review out in September

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[illegible] from games are packaged in 10[illegible] Quality Audio Video Series detailed [illegible] and [illegible] cover.

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STAR GAME in Software Today [illegible] HCW
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The computer game is DEAD...

Brainbox corner

Tricky tapes for bright sparks reviewed by our regular team

Astronomer 48K Spectrum £9.95

CP 2 Glebe Rd, Uxbridge Middx UB8 2RD

Astronomer is amazing Taking latitude longitude and time parameters it calculates the position of the stars and planets, then displays them in a variety of formats so that you can peep into the future, or the past and view the night sky exactly as it will be, or was, from any point on the Earth

When viewing a section of sky you can ask that constellations are drawn in, or planets highlighted or you can view the planets in the Solar System and watch their movement from the input date

Using the Spectrum's computational facilities any view from any part of the Earth at any time can be synthesised so it is suitable For enthusiasts to calculate rising and setting times and positions of bodies in the Solar System There is however a time penalty while the Spectrum grapples with the maths involved

The graphics are stunning it's like looking up on a clear night and there's a fascination in looking at the sky as the Romans saw it, or on the night of your birth A well written manual guides your use of this first class package D M

instructions	100%
ease of use	100%
display	110%
value for money	90%

★ ★ ★ ★ ★

Computer Scrabble Commodore 64 £12.95

Leisure Genius, 3 Montagu Row, London W1H 1AB

It's quite some time since a Spectrum version of Scrabble appeared, now a Commodore version is available and it was worth waiting for

The cassette version of the program comes in a cardboard box with a clear instruction leaflet It has a vocabulary of over 11,000 words so it takes an age to load You can have up to four players, any or all of which can be the computer

There are a lot of nice touches including graphics for use on black and white TVs options to allow you to watch the computer thinking, see other players' racks and ask for a hint if you're stuck and receive comments on your efforts You can cheat By challenging the computer's words ignoring its challenges, or swapping letter racks in the middle of a game

There are four play levels and the computer should score an average of 330 points in a two player game at its highest level It only managed a score of 215 against me — but unless you're a Scrabble champion, you should still find it a worthy opponent M N

instructions	100%
playability	90%
graphics	90%
value for money	90%

★ ★ ★ ★ ★

White Lightning 48K Spectrum £14.95

Oasis Alexandra Parade Weston Super Mare, Avon

This is not a games designer program, but a complete development system White Lightning appears to have no limitations The demo tape shows huge neatly defined and coloured sprites (shapes) moving in a variety of speeds some lightning fast, rotating, rising, falling and accelerating in a professional, flicker free manner

The manual explains that this is a suite of programs to design sprites, and manipulate them on the screen Using the Z80 interrupt facilities, two actions can take place simultaneously by accessing the animation language IDEAL This can be done from BASIC whilst you become familiar with it The really professional effects are produced by using Spectrum Forth, which is included and which you need to learn

So what's the advantage? White Lightning is easier to learn and when learnt, all the routines are available You don't have to write them for yourself before getting on with the game design You are free to publish games written using this package, so all you need for professional games production is this small amount of money, time, and imagination! Very impressive D M

instructions	100%
ease of use	see text
display	N/A
value for money	100%

★ ★ ★ ★ ★

Graphics Designer Commodore 64 £9.95

Supersoft Winchester House, Canning Rd, Wealdstone Harrow HA3 7SJ

If you're looking for a package to help you design user defined graphics and sprites, look no further, this one's the best I've ever seen The strength of this package is that the author has looked at the problem and found the ideal solution

A grid is used to give a blow up view of the sprite or UDG Any changes made to this blow up are reflected in the sprite or UDG edited There are commands available for the setting and clearing of points the reversing inverting and shifting of the pattern

The joy of the program is the operation in multicolour mode Most other programs expect you to remember which bit combination gives which colour Character designer does this For you by allowing you to choose your paintbrush The colours are shown on the blown up version giving a better idea of the sprite or UDG A work area is given in the UDG mode enabling you to build up macro designs using several UDGs

Overall, fast reliable machine code package making the design of graphics trivial At this price excellent A W

instructions	100%
ease of use	90%
display	90%
value for money	95%

★ ★ ★ ★ ★

Graphics Editor Commodore 64 £14.99

Romik, 272 Argyll Ave, Slough, Berks SL1 4HE

This is a three part package for designing user defined graphics sprites and creating screen designs There is also the facility for the creation and running of animated sequences using sprites

As such the sprite and UDG editors are unexceptional and of average quality There are the usual commands for the setting and clearing of points the reversing inverting and scrolling of designs You can also OR EXOR and AND specified UDGs or sprites The implementation of multicolour mode was poor and you have to remember which bit pattern gives which colour

The strong point of the package is the screen editor This enables you to use your UDGs (not sprites) to design the screen layouts These screens can be saved and reloaded later There are commands for specifying colours placing of characters and creation and movement of areas of screen

Overall this is a handy package whose high point is the screen editor The package operates reliably and speedily and is of acceptable quality, albeit unexpanded It's not the best character editor I've used but it is worth a close look A W

instructions	95%
ease of use	70%
display	90%
value for money	65%

★ ★ ★ ★ ★

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...LONG LIVE Eureka!

By Ian Livingstone

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Design and dra

This program by Ian Sellman shows you how to simulate UDGs on your Dragon

The Dragon doesn't provide the true user defined graphics, but instead has the powerful GET and PUT commands However it is possible to simulate UDGs very simply

First, find out the eight binary numbers which must be used to define the character To do this, type in and use the program given below The commands are as follows

CURSOR KEYS move the cursor around the grid
FILL (F) fill in the square the cursor is on
CLEAR KEY clear the square the cursor is over
RESTART (D) clear the grid and restart the program
PRINT (P) send the binary numbers to the print (only use if print attached)
SAVE (S) save to tape the character
LOAD (L) load back from tape a character
END (E) end the program

While you are defining a character you will be able to see it at the bottom of the screen The binary numbers are displayed to the right of the grid

To use these numbers in your program you have to POKE the numbers on to the screen and then GET them into an array

Example program

```
10 PMODE4,1
20 PCLS
30 SCREEN 1,1
40 FOR A=1 TO 8
50 READ B
60 POKE &H600+A,B
70 NEXT A
80 DIM C(8,8)
90 GET (0,0)-(7,7),C,G
100 END
110 DATA 255, 255, 255, 255, 255, 255, 255, 255
```

This program defines a solid block and shows your UDG This is easier than drawing the characters on screen then GETting them into an array

Now you can use the PUT command as normal

Variables

A(20) PUT details for a full square
B(16) cursor
C(10) blank out a filled square
D(8,8) 1 if square is filled, 0 if it is not
ES(9) string of instructions used to draw characters on screen
A X position of cursor on grid
B Y position of cursor on grid
C count in FOR NEXT loops
**A$** used with INKEY$ statement to get a character from the keyboard
N$ used for filename when character is saved on to or loaded from tape

How it works

10-130 dimension arrays, set variables
200-350 draw grid on which characters will be designed
360-390 place cursor on screen
400-430 check if any cursor keys are being pressed and move accordingly
480-580 check for options such as FILL or CLEAR
590-630 reverse cursor
640-700 print out a line of character at the bottom of the grid
710-860 save character routine
870-1020 load a character from tape
1030-1120 print out character number at side of grid
1130-1240 calculate correct binary numbers and convert them to decimal
1250-1320 calculate all numbers and print up all lines of characters
1360-1530 print numbers out to a printer
1540-1630 definitions for numbers printed on screen

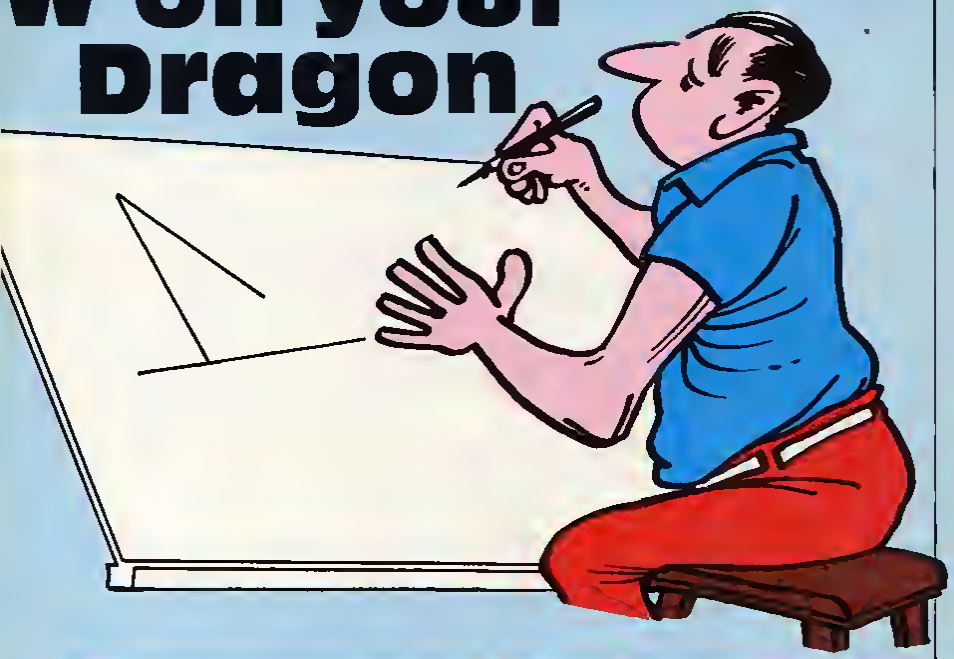
Hints on conversion

This program should run as it stands on the Tandy 32k colour computer with Extended BASIC If you wish to convert it for another computer here is a brief list of some of the Dragon's commands

PMODE4,1 set graphics to a two colour mode giving a resolution of 256*192
PCLS clear graphics screen
LINE draw line between two points
GET move a section of screen onto a given array
PUT plot array back on to screen
SCREEN alternate between graphics and text screens
PSET plot a point on screen
OPEN "O" open file for output
OPEN "I" open file for input
PRINT#-1, print to file
INPUT#-1, inputs from a file
CLOSE close both types of file
PRINT#-2, print out to a printer

```
10 REM ************************
20 REM *                      *
30 REM *  CHARICTER DEFINER   *
40 REM *                      *
50 REM ************************
60 REM
70 REM ************************
80 REM *  DIM ARRAY S ETC     *
90 REM ************************
100 DIM A(20)
110 DIM B(16)
120 DIM C(10)
130 DIM D(8,8)
140 DIM E$(9)
150 A=1
160 B=1
170 FOR C=0 TO 9
180 READ E$(C)
190 NEXT C
200 REM ****************
210 REM *  DRAW GRID   *
220 REM ****************
230 PMODE4,1
240 PCLS
250 LINE(0,0)-(120,20),PSET,BF
260 GET(0,0)-(120,20),A,G
270 PCLS
280 SCREEN 1,1
290 FOR X=10 TO 180 STEP 20
300 LINE(X,10)-(X,170),PSET
310 NEXT X
320 FOR Y= 10 TO 180 STEP 20
330 LINE(10,Y)-(170,Y),PSET
340 NEXT Y
350 GOSUB 1290
360 REM ****************
370 REM *  MAIN LOOP   *
380 REM ****************
390 PUT(A*20-5,B*20-5)-(A*20+5,B*20+5),B,NOT
400 REM **********************
410 REM *  CHECK FOR MOVE    *
420 REM **********************
430 IF PEEK(344)=223 AND A<8 THEN GOSUB620:A=A+1:GOSUB620
440 IF PEEK(343)=223 AND A>1 THEN GOSUB620:A=A-1:GOSUB620
450 IF PEEK(342)=223 AND B<8 THEN GOSUB620:B=B+1:GOSUB620
460 IF PEEK(341)=223 AND B>1 THEN GOSUB620:B=B-1:GOSUB620
470 PUT(A*20-5,B*20-5)-(A*20+5,B*20+5),B,NOT
480 REM **********************
490 REM * CHECK FOR OPTIONS  *
500 REM **********************
510 A$=INKEY$
520 IF A$="F" THEN PUT(A*20+9,B*20-9)-(A*20+9,B*20-9),A,
PSET:D(A,B)=1:GOSUB620:D GOSUB 1170
530 IF A$=CHR$(12) THEN PUT(A*20+9,B*20-9)-(A*20+9,B*20+9)
,C,PSET:D(A,B)=0:GOSUB
540:GOSUB 1130
540 IF A$="C" THEN RUN
550 IF A$="S" THEN GOSUB 710
560 IF A$="L" THEN GOSUB 870
570 IF A$="P" THEN GOSUB 1300
580 GOTO 390
590 REM ********************
600 REM *  REVERSE SQUARE  *
610 REM ********************
620 PUT(A*20-5,B*20-5)-(A*20+5,B*20+5),B,NOT
630 RETURN
640 REM ****************
650 REM *  PRINT CHAR  *
660 REM ****************
670 FOR D=1 TO 8
680 PSET(30+8,180+8,0(A,D))
690 NEXT D
700 RETURN
710 REM ****************
720 REM *  SAVE CHAR   *
730 REM ****************
740 CLS
750 INPUT "ENTER FILENAME ";N$
760 PRINT
770 INPUT "WIND TAPE, PRESS PNLY & RECORD  AND THEN
PRESS ENTER";D$
780 SCREEN1,1
790 OPEN "O",#-1,N$
800 FOR C=1 TO 8
810 FOR D=1 TO 8
820 PRINT#-1,D(C,D)
830 NEXT D
840 NEXT C
850 CLOSE
860 RETURN
```

w on your Dragon



```
870 REM ****************
880 REM *  LOAD CHAR  *
890 REM ****************
900 CLS
910 INPUT "ENTER FILENAME ";N$
920 SCREEN 1,1
930 OPEN "I",#-1,N$
940 FOR C=1 TO 8
950 FOR D=1 TO 8
960 INPUT#-1,DIC,D)
970 IF DIC,D)=1 THEN PUT(C*20-9,D*20-9)-(C*20+9,D*20+9),
A,PSET ELSE PUT(C*20-9,D *20-9)-(C*20+9,D*20+9),C,PSET
980 NEXT D
990 NEXT C
1000 CLOS
1010 GOSUB 1250
1020 RETURN
1030 REM ******************
1040 REM *  PRINT NUMBER  *
1050 REM ******************
1060 LINE(X,Y)-(X+22,Y-61,PRESET,BF
1070 DRAW"BM"+STR$(X)+","+STR$(Y)
1080 FOR C=1 TO 3
1090 Z=VAL(MID$(ZS,C,1))
1100 DRAW ES(Z)
1110 NEXT C
1120 RETURN
1130 REM ***********************
1140 REM *  CALCULATE NUMBER  *
1150 REM ***********************
1160 Z=0
1170 FOR U=1 TO 8
1180 IF D(U,8)=1 THEN Z=Z+2^(8-U)
1190 NEXT U
1200 Z$=RIGHT$("000"+STR$(INT(Z+.5)),3)
1210 Y=8*20
1220 X=200
1230 GOSUB 1030
1240 RETURN
```

```
1250 REM ************************
1260 REM *  CALC ALL NUMBERS  *
1270 REM ************************
1280 TA=0
1290 TB=0
1300 FOR A=1 TO 9
1310 B=A
1320 GOSUB 1130
1330 GOSUB 650
1340 NEXT A
1350 A=TA
1360 B=TB
1370 RETURN
1380 REM ***************
1390 REM *  PRINTOUT  *
1400 REM ***************
1410 PRINT#-2,"DEFTIRER PROGRAM"
1420 PRINT#-2,"COPYRIGHT IAN SELLMAN"
1430 PRINT#-2,""
1440 FOR V=1 TO 8
1450 Z=0
1460 FOR U=1 TO 8
1470 IF D(U,V)=1 THEN Z=Z+2^(8-U)
1480 NEXT U
1490 PRINT#-2,INT(Z);
1500 IF V<8 THEN PRINT#-2,",";
1510 NEXT V
1520 PRINT# 2,""
1530 RETURN
1540 DATA "BM+8,-1FR2EU4HL2BD4BM+3,+1"
1550 DATA "BM+1,+8U6GBR+6,+5"
1560 DATA "BM+4,+8L4UER2EU2HL3GBM+8,+5"
1570 DATA "BM+8, 1FR2EUHL2R2EUHL3GBM+8,+5
1580 DATA "BM+3,+8U6G3R4BM+4,+3"
1590 DATA "BM+8,-1FR2EU2HL3U2R4BM+4,+6"
1600 DATA "BM+8,-2ER2FD6L2HU4ER2FBM+4,+5"
1610 DATA "BM+2,+8U2E2U2L4BM+8,+6"
1620 DATA "BM+1,+8R2EU4L2HUER2FD6L2GBM+7,+8"
1630 DATA "BM+8,-1FR2EU4HL2GDR3BM+4,+3"
```

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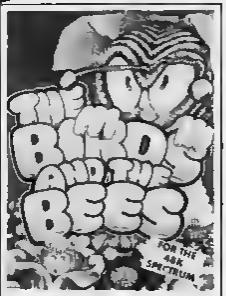

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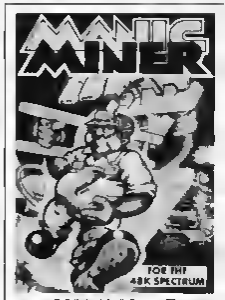

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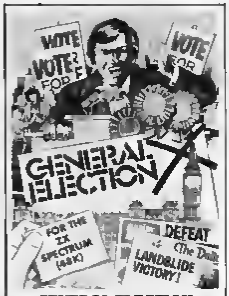

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Strip Poker Commodore 64 £9.95

US Gold, Unit 24, Tipton Trading Est, Bloomfield Rd, Tipton, W Midlands

Here's a program to set you drooling a card game with multicolour hi resolution nudes (all done in the best of taste of course) After the plethora of bonkoon games it was nice to play something a little more mature This program is a good implementation of draw poker And, to a relative amateur at the game presents a good challenge

The screen is split into two portions The top half shows the full colour picture of your glamorous opponent and the bottom, rather smaller portion shows the cards

You each start with $100 and your opponent can borrow $100 by removing a garment All the normal facilities are available including betting raising and calling You can change any number of your cards and all is done with tolerable sound effects of shuffling and dealing

The tape comes with two opponents, one on each side and each equally attractive Turbo loading is used and operates without problems My one complaint is that a joystick must be used to play the game

In all an excellent buy, if only for the graphics

A W

instructions	80%
ease of use	95%
graphics	95%
value for money	95%

★ ★ ★ ★ ★

Caverns of Khafka Commadore 64 £7.95

US Gold, Unit 24, Tipton Trading Est, Bloomfield Rd Tipton, W Midlands

This is the latest offering from the author of Forbidden Forest and Aztec Challenge The question is, does it live up to the same high standard? The answer is go Whilst the same imaginative use of user defined graphics is utilized this game doesn't have their addictive quality

The action takes place in a maze of caverns shown in side view You control an Indiana Jones type character in his search for sacred tablets

He is opposed by vampire bats scarabs falling rocks and pools of larva and acid This hero is quite versatile being able to walk, jump, crawl, climb a rope and shoot (all by means of the joystick!)

When a tablet is found, it must be carried via a lift to a spot in the bowels of the earth Collect five and you are conveyed to the inner sanctum where you must avoid guards and reach the statue of the sphinx If you achieve this you are awarded cash and the saga is repeated

Overall a great idea using great graphics and nice sound which rapidly runs out of steam M W.

instructions	75%
ease of use	80%
graphics	80%
value for money	60%

★ ★ ★

Astro Chase Commodore 64 £8.95

State Soft, Business & Technology Centre Bessemer Drive Stevenage, Herts

This game is similar to Asteroids but with greater depth The screen shows the earth surrounded by a large number of planets and stars As you move your spaceship about the screen scrolls to show more of the universe

The idea is to protect the earth from megamines which home in from outer space If one hits the earth — oblivion As you zip about shooting the megamines you are attacked by spaceships There are eight types, each with different abilities As you progress your energy level drops This can be replenished by rendezvousing with Energy Generators There are also shield depots which will replenish your protective field

The game has a high degree of complexity and there are a variety of tactics open to you The graphics are excellent and very colourful Sound was quite good but the optional use of a mutilated version of the 1812 overture was irritating

A comprehensive instruction booklet is supplied but it would have been useful if pictures of the various spaceships etc had been given to aid identification Overall, a pretty good game

A W

instructions	100%
ease of use	85%
graphics	85%
value for money	85%

★ ★ ★ ★ ★

Mystic Monsion Commodore 64 £8.95

US Gold, Unit 24, Tipton Trading Est, Bloomfield Rd, Tipton, W Midlands

This program is billed as a graphical adventure with arcade elements This is a tolerably accurate description and the concept is quite novel

You control a ghost searching a 80 room mansion for 40 treasures The rooms are on ten levels and you can choose any You must start at level one for a maximum score There are 15 skill settings

Each room is shown in simple plan and presents a problem to solve from the shooting of aliens to the solving of logic problems The ghost can mutate into objects like a spade gun or torch to help in certain situations As the base of each map is a clue sometimes giving the solution Often access to rooms will depend on success in another room

Time in the rooms is subject to a varying limit depending on the problem Exceed your time and you lose a life

The graphics are fair with minimal use of sound The problems should give hours of frustration, but when solved, the game will have questionable value

M W

instructions	80%
ease of use	75%
graphics	70%
value for money	70%

★ ★ ★ ★

Flip and Flap Commadore 64 £8.95

State Soft, Business & Technology Centre Bessemer Drive Stevenage, Herts

My initial reaction to the demo screen of this game was that it was a Q Bert clone I was wrong It is vastly superior

You help a kangaroo and a monkey evade capture by the minions of the zoo The action takes place on a network of square platforms in 3D linked by ladders The kangaroo hops all out the platforms, for the screens involving the monkey the platforms become ceilings from which it hangs Since the screens alternate between the two this reversal of perspective adds to the difficulty

Our heroes are pursued by a zookeeper and a net, both of which become progressively more difficult to evade You must also step on squares with a square marking them white in the process Change all of these squares to complete the screen Scattered about the screen are flashing squares which are sticky and will impede your pursuer if lured onto them As you progress the screens get more complex and life gets tougher

Overall an excellent game with first class graphics and sound and guaranteed to keep you at it for hours

A W

instructions	95%
ease of use	80%
graphics	95%
value for money	95%

★ ★ ★ ★ ★

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Don't get lost!

If you find geography boring, then this program from Andrew Bird may be just what you're looking for to improve your knowledge of the names of towns and cities in Great Britain

If you find that geography is as interesting as watching paint dry, then perhaps the subject has not been made interesting enough for you

With the Towns and Cities program, you have the chance to learn exactly where certain towns are positioned in mainland Britain.

The program is split into three sections: show, locate and test. The show mode displays all 50 towns in the memory (five at a time), on a base plan of Britain. This routine can be performed at any one of five speeds to suit the user.

The second option — locate — will find and display a town or city of your choice (provided it is in the computer's memory), so you can take some time studying the position of individual towns.

Once you think you know where all the towns and cities are, you can go to option three which is the test. You select how many towns you wish to be tested on, and the computer picks them at random.

All you have to do is manouver the dot across the country to the position you believe is correct. When you think you have positioned the dot correctly, you press Break, Space and the computer draws a small circle around that dot.

It then compares your guess with the correct position and a message appears announcing the result. The correct position is then drawn.

A data check routine has been included at the end of this program, which simply checks all the co-ordinates for accuracy. Once used, this can then be omitted.

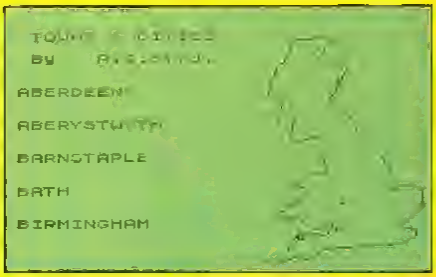
So, if you are thinking of becoming a lorry driver, or perhaps a geography teacher, then this is the program for you.

Variables

Dim t$ town names
Dim x) coastline co-ordinates
Dim y)
Dim a) town co-ordinates
Dim b)
data) used for reading data
ZS) statements
S$ instruction
l$ town you require locating
an) co-ordinates of dot you
bb) manouvre
ad) difference between your guess
bd) and correct co-ordinates
speed speed of display
test number of town in your test
town town selected by computer
total used to check data
i ink colour of town
sc score
f general purpose loop

How it works

1-5 set caps lock, keyboard beep, dim arrays
10-50 data for map and town positions
100-145 set up arrays
150-280 menu
1000-1150 show routine (computer displays towns)
2000-2090 locate routine (computer finds a town)
3000-3300 test routine (computer tests you)
5000-6000 draws map and prints title
8000-8030 data for town names
9000-9080 data check (can be omitted after use)




```
  1 REM  Towns & Cities                    By    A.B.Bird
  2 INK 1: CLS
  3 POKE 23658,8: POKE 23609,30
  4 PRINT AT 2,10;"PLEASE WAIT"
  5 DIM t$(50,14): DIM x(48): DIM y(48): DIM a(50): DIM b(50)
  9 REM  Data to draw map
 10 DATA -11,19,0,-12,11,13,6,12,-4,4,1,9,6,0,-14,10,0,-8,-48,-8,-10,-12,-4,12,
8,16,4,-10,-14,-6,-4,18,-2,-7,10,10,2,-7,3,-19,3,-10,3,-10,7,3,7,23
```

```
  20 DATA -19,0,-4,-28,0,-27,-2,-2
,14,-2,8,-4,10,-3,3,15,6,-1,10,0,6,14,8,-4,16,-3,20,0,23,0,18,1
  29 REM Data for town position
  30 DATA 194,169,170,193,196,187,223,191,223,182,186,204,203,236,185,188,182,15
9,173,187,218,237,201,207,214,187,194,210,203
  40 DATA 210,237,207,207,178,171,212,208,217,204,187,226,209,231,198,174,179,15
7,193,184,209
  50 DATA 140,50,25,31,51,79,21,33,42,33,94,49,57,25,129,117,17,42,115,44,76,42,
79,83,65,72,72,91,99,45,58,58,39,126,11,20,33,84,67,56,67,21,35,60,36,13,9,54,63
,82
  99 REM  DIMension Arrays
 100 RESTORE 10: FOR f=1 TO 48: READ data: LET x(f)=data: NEXT f
 110 RESTORE 20: FOR f=1 TO 48: READ data: LET y(f)=data: NEXT f
 120 RESTORE 30: FOR f=1 TO 50: READ data: LET a(f)=data: NEXT f
 130 RESTORE 50: FOR f=1 TO 50: READ data: LET b(f)=data: NEXT f
 140 FOR f=1 TO 50: READ z$: LET t$(f)=z$: NEXT f
 145 GO SUB 9000
 149 REM  Menu
 150 PRINT  PAPER 1; INK 4; BRIGHT 1;"  MAINLAND  TOWNS  AND  CITIES  "
 160 PRINT AT 2,0; INK 2; INVERSE 1;"Menu"
 170 PRINT AT 4,0; INK 3;"1 SHOW";AT 11,0;"2 LOCATE";AT 18,0;"3 TEST"
 180 PRINT AT 6,0;"The computer plots the position of fifty towns and cities in
   England, Scotland and Wales."
 190 PRINT AT 13,0;"The computer will locate and    display a specific town or c
ity of your choice."
 200 PRINT AT 20,0;"The computer tests you on your  ability to find towns on the
 map"
 230 FOR f=1 TO 100: NEXT f
 240 LET s$=" Press  1, 2, or 3 "
 250 FOR f=1 TO LEN s$: PRINT AT 2,7+f; PAPER 6; INK 0;s$(f): BEEP .05,20+f: NEX
T f
 260 IF INKEY$="1" THEN  GO TO 1000
 270 IF INKEY$="2" THEN  GO TO 2000
 280 IF INKEY$="3" THEN  GO TO 3000
 290 GO TO 260
 999 REM  Show routine
1000 CLS : BEEP .01,30
1010 PRINT  INK 3;"1 SHOW"'' ; INK 1;"Please INPUT speed at which you"  "wish to
 be shown towns & cities."
1020 PRINT AT 9,10;"1 Very slow";AT 11,10;"2 Slow";AT 13,10;"3 Medium";AT 15,10;
"4 Fast";AT 17,10;"5 Very fast"
1030 FOR f=1 TO 200: NEXT f: INPUT speed
1040 FOR f=1 TO 300: NEXT f
1050 GO SUB 5000
1060 LET n=1: FOR n=1 TO 50
1080 PRINT AT 2+n*3,0; INK n;t$(n)
1090 CIRCLE  INK n;a(n),b(n),1.5
1100 BEEP .1,30: FOR f=1 TO 800-speed*150: NEXT f
1110 LET n=n+1: IF n>5 THEN  LET n=1
1120 IF n=50 THEN  GO TO 1150
1130 IF n/5=INT (n/5) THEN  GO SUB 5000
1140 NEXT n
1150 FOR f=1 TO 200: NEXT f: CLS : GO TO 150
1999 REM  Locate routine
2000 CLS : BEEP .01,35
2010 PRINT  INK 3;"2 LOCATE'     INK 1;"Please INPUT the full name of"' "the town
 or city you wish the"' "computer to locate.
2020 FOR f=1 TO 200: NEXT f: INPUT l$
2030 FOR f=1 TO 200: NEXT f
2040 GO SUB 5000
2050 FOR f=1 TO 50: IF l$=t$(f,1 TO LEN l$) THEN  GO TO 2080
2060 NEXT f
2070 PRINT '  ' "I do not have that'  "town in my memory": FOR f=1 TO 400: NE
XT f: CLS : GO TO 150
2080 PRINT 7,0; INK 4;t$(f): CIRCLE  INK 4;a(f),b(f),1.4: FOR f=1 TO 200: NEXT f
2090 PRINT AT 19,0;"Press any key"  "to continue.": PAUSE 0: CLS : GO TO 150
```

```
2999 REM  Test routine
3000 LET sc=0: CLS : BEEP .01,40
3010 PRINT  INK 3;"3 TEST"''  INK 1;"How many towns and cities do you"''"want to
 be tested on ?( 1 - 50 )"
3020 FOR f=1 TO 200: NEXT f: INPUT test
3030 IF test>50 OR test<0 THEN  GO TO 3020
3040 CLS : PRINT  INK 3;"3 TEST" '' INK 1;"You will be tested on ";test;" towns"
' "and cities."  "Move the dot around the map"''"using keys 5,6,7,& 8. When you"
 'think its in the correct place"' "press 'Break Space ."
3050 PRINT AT 21,2;"Press any key to continue.": PAUSE 0
3060 FOR n=1 TO test
3070 LET aa=221: LET bb=34
3080 RANDOMIZE
3090 LET town=INT (RND*50)+1
3100 GO SUB 5000
3120 PRINT AT 5,0; INK 1;"Where is.....";AT 7,0;t$(town)
3130 IF INKEY$="" THEN  CIRCLE aa,bb,3: BEEP .2,50: GO TO 3200
3140 LET aa=aa+2*(INKEY$="8" AND aa<250)-2*(INKEY$="5" AND aa>150)
3150 LET bb=bb+2*(INKEY$="7" AND bb<170)-2*(INKEY$="6" AND bb>5)
3160 PLOT  INK 0;aa,bb
3170 BEEP .01,aa/20: BEEP .01,bb/20
3180 PLOT  OVER 1;aa,bb
3190 GO TO 3130
3200 IF a(town)>aa THEN  LET ad=a(town)-aa: GO TO 3220
3210 LET ad=aa-a(town)
3220 IF b(town)>bb THEN  LET bd=b(town)-bb: GO TO 3240
3230 LET bd=bb-b(town)
3240 IF ad>4 OR bd>4 THEN  FOR f=5 TO 21 STEP 2: PRINT AT f,0; INK 2;"   W R O N
 G  ": BEEP .1,0-f: NEXT f: CIRCLE  INK 4;a(town),b(town),1.4: GO TO 3270: GO TO
 3280
3250 IF ad>1 OR bd>1 THEN  PRINT AT 5,0; INK 3;"NEAR.........You" '"where only a
 few"''"miles out": BEEP 1,10: CIRCLE  INK 4;a(town),b(town),1.4: GO TO 3270: GO
 TO 3280
3260 FOR f=21 TO 5 STEP -2: PRINT AT f,0; INK 4;" C O R R E C T": BEEP .1,30-f:
NEXT f: LET sc=sc+1: CIRCLE a(town),b(town),1.4
3270 FOR f=1 TO 400: NEXT f: NEXT n
3280 FOR f=1 TO 200: NEXT f: CLS : PRINT  INK 3;"3 TEST": PRINT  ' ; INK 1;"At t
he end of your test you have"''"correctly located ";sc;" of the ";test; '"towns
% cities set for you by" '"the computer"
3290 PRINT AT 21,2;"Press any key to continue': PAUSE 0
3300 CLS : GO TO 150
4999 REM  Map & Title subroutine
5000 CLS : PLOT  INK 1;190,170: FOR f=1 TO 48: DRAW x(f),y(f): NEXT f
6000 PRINT AT 0,0; INK 0; PAPER 6;" TOWNS & CITIES ";AT 2,0;" By   A.G.Bird. ":
RETURN
7999 REM  Data of town names
8000 DATA "ABERDEEN","ABERYSTWYTH","BARNSTAPLE","BATH","BIRMINGHAM","BLACKPOOL",
"BRIGHTON","BRISTOL","CAMBRIDGE","CARDIFF","CARLISE","COVENTRY","DERBY","DOVER"
8010 DATA "DUNDEE","EDINBURGH","EXETER","FISHGUARD","GLASGOW","HEREFORD","HULL",
'IPSWICH',"LEEDS",'LEICESTER','LINCOLN','LIVERPOOL',"MANCHESTER","MIDDLESBROUGH"
8020 DATA "NEWCASTLE","NORTHAMPTON","NORWICH","NOTTINGHAM","OXFORD","PERTH","PLY
MOUTH","PORTSMOUTH","READING",'SCARBOROUGH',"SHEFFIELD","SHREWSBURY","SKEGNESS"
8030 DATA "SOUTHAMPTON","SOUTHEND","STOKE ON TRENT","SWANSEA","TORQUAY","TRURO",
"WOLVERHAMPTON","WREXHAM","YORK"
8999 REM  Check data
9000 LET total=0: FOR f=1 TO 48: LET total=total+x(f): NEXT f
9010 IF total<>0 THEN  PRINT "YOU HAVE AN ERROR IN DATA."  "LINE 10": STOP
9020 LET total=0: FOR f=1 TO 48: LET total=total+y(f): NEXT f
9030 IF total<>0 THEN  PRINT '"YOU HAVE AN ERROR IN DATA."  "LINE 20 : STOP
9040 LET total=0: FOR f=1 TO 50: LET total=total+a(f): NEXT f
9050 IF total<>9900 THEN  PRINT '"YOU HAVE A ERROR IN DATA."' "LINES 30 OR 40":
 STOP
9060 LET total=0: FOR f=1 TO 50: LET total=total+b(f): NEXT f
9070 IF total<>2880 THEN  PRINT   "YOU HAVE AN ERROR IN DATA."''"LINE 50": STOP
9080 CLS : RETURN
```

What's on Your T.V. Tonight

MIND GAMES

Argus Press Software Group

Recommended viewing

Early Evening
6.40 pm Orion Quest

A full feature adventure starring well known nasty aliens the Zarps
Can you play the hero and stop their plans to blow up the earth.
Screen play N White
Costume Design D Jardon
Directed Martin Edwardes
Produced Argus Press Software
Available for Spectrum 48K BBC CBM 64

Mid-evening
9.00 pm Quest for Eternity

Starring The Overlords of the Universe
The candidate (you) have to get to the Chamber of Creation It's a laugh a minute since it's 2000 light years away on the most horrible planet in the Universe and your starship doesn't work either!
Written by David Cockram
Directed Martin Edwardes
Produced Argus Press Software
Available for Atari, Spectrum 48K CBM 64

Midnight Movie
11.55 pm Star Force Seven

Starring The Zurgs
After a desperate space battle only one fleet of heroes remain to prevent the invasion of earth The future of humanity lies with you!
Written by Ian Soutar
Special Effects Ian Soutar
Directed Martin Edwardes
Produced Argus Press Software
Available for BBC Spectrum 48K CBM 64

For mail order write with cheque/PO /card No to
Mind Games Argus Press Software Group No 1 Golden Square London W1

CHARTBUSTERS

BRITAIN'S SOFTWARE CHARTS

by the GSP Market Research Group

ARCADE

1	Daley Thompson Decathlon	Ocean	CBM 64 (2)
2	Full Throttle	Micromega	Spectrum (1)
3	Tornado Low Level	Vortex	Spectrum (-)
4	Beach Head	Psion	Spectrum (6)
5	Sabre Wulf	Ultimate	Spectrum (3)
6	Jet Set Willy	S Projects	Spectrum (7)
7	Monty Mole	Gremlin	Spectrum (4)
8	Matchpoint	Psion	Spectrum (10)
9	Trashman	Quicksilva	CBM 64 ( )
10	Potty Pigeon	Gremlin	CBM 64 (9)

NON-ARCADE

1	Lords of Midnight	Beyond	Spectrum (1)
2	Mugsy	Melbourne Hse	Spectrum (2)
3	War of the Worlds	CRL	Spectrum (-)
4	Star Trader	Bug Byte	Spectrum (5)
5	The Inferno	R Shepherd	Spectrum (10)
6	Savage Pond	Starcade	BBC (6)
7	Valhalla	Legend	CBM 64 (4)
8	Pitfall	Activision	CBM 64 (3)
9	Fall of Rome	Argus	CBM 64 (7)
10	Classic Adventure	Melbourne Hse	CBM 64 (8)

Compiled with the assistance of Britain's leading software distributors, including: Pinnacle, SDL, PCE, Websters, PCS and Software Centre.

SPECTRUM

1	Matchpoint	Sinclair (6)
2	Jet Set Willy	S. Projects (2)
3	Fighter Pilot	Digital ( )
4	Tornado Low Level	Vortex (1)
5	Night Gunner	Digital ( )
6	Full Throttle	Micromega (3)
7	Stop the Express	Sinclair ( )
8	Trashman	New Generation (-)
9	Lords of Midnight	Beyond (8)
10	Bulls Eye	Masertronics (-)

COMMODORE 64

1	3DX Racers	Mastertronic (6)
2	Gyropod	Tasket ( )
3	Space Walk	Mastertronic ( )
4	Hektik	Mastertronic (4)
5	Beach Head	Centresoft (1)
6	Super Pipeline	Tasket ( )
7	Squirm	Mastertronic (10)
8	Snooker	Visions ( )
9	Arabian Nights	Interceptor (-)
10	Room Lord	Paramount ( )

DRAGON 32

1	Chuckie Egg	A & F ( )
2	Cuthbert in Space	Microdeal ( )
=	Hunchback	Ocean ( )
4	Mr Dig	Microdeal (5)
5	Ring of Darkness	Wintersoft (6)
6	Dragon Chess	Oasis ( )
7	Hungry Horace	Melbourne Hse ( )
8	Dragonfly 2	Hewson (7)
=	Chocolate Factory	Minits (8)
10	Mystery of the Java Star	Shards ( )

Compiled by W. H. Smith and Websters. Figures in brackets are last week's positions.

VIC-20

1	Flight 015	Craig Comtens (4)
2	Snooker	Visions (10)
3	Chatton Race	Micro Antics (5)
4	Crazy Kong	Int Micro (8)
5	Duck Shoot	Mastertronic (1)
6	Phantom Attack	Mastertronic ( )
7	Sub Hunt	Mastertronic (6)
8	Wizard and the Princess	Melbourne Hse (2)
9	Vegas Jackpot	Mastertronic (7)
10	Undermine	Mastertronic (-)

BBC

1	Aviator	Acornsoft (10)
2	Fortress	Pace ( )
=	Chess	Micro Power (-)
4	Snooker	Acornsoft (3)
5	SD Munchy	Micromega ( )
=	Battle Tank	Superior (8)
7	747 Simulator	Doctorsoft (6)
8	Star Head	Mastertronic ( )
9	JCB Digger	Acornsoft (4)
10	Qwak	Micromega ( )

ZX81

1	Alien Rain	CRL (1)
2	Planet Raider	Novus (3)
3	Krypton Ordeal	Novus (2)
4	Walk the Plank	Novus (4)
5	Scramble	Quicksilva (5)
=	Flight Simulation	Sinclair (7)
7	Black Crystal	PSS (10)
8	Hopper	PSS (10)
9	Pyjamarama	Sinclair ( )
10	Mothership	Sinclair (10)
=	Games 1K	Sinclair (7)

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MIND GAMES

SPECTRUM 48K CBM64

Atom Smasher Electron £6.99

Romik, 272 Argyll Ave Slough, Berks

Having played this game on the new Amstrad I looked forward to trying it on the Electron too What a disappointment! The good detailed graphics and attractive screen layout had become crude block effects in very few colours It didn't even look like the same game This company always supplies a 'screen shot' from the game on the cassette sleeve but in this case it isn't even accurate

The aim of the game is to shoot the wandering proton in the nucleus of the atom while avoiding the electrons which circle it It's fairly fast but far slower than on the other machine At the same time as shooting the proton you also have to shoot away the debris which encroaches from the sides of the screen

All told this is a good game concept which has been very poorly implemented on this machine The instructions are only fair, being a little too short but the keys are appropriate

Quite honestly, if this is the best that Romik can do with the Electron I don't why they bothered **D.C**

instructions	75%
playability	40%
graphics	25%
value for money	35%

★ ★

Alien Break In Amstrad £6.99

Romik, 272 Argyll Ave Slough, Berks

It really does amaze me how people manage to find another combination of words to use for the basic space invader type games This is another one of the type, and as this is a new computer I suppose we ought to have expected that someone would provide one soon

Here we have the Zargon fleet trying to steal all our uranium The number and variety of invaders is astounding The mothership are dropping pods which hatch out on landing and the only way to destroy them is to drop them into your ration of five holes If you decide to shoot them they split into two and then float [illegible] indestructibly for a while before turning into fighters

There are also bombs to avoid and lasers to fire Despite all this there is little difficulty in scoring, to start with at least, and the biggest enemy I find is boredom You never get to clear a sheet, so the invasion is quite relentless and makes me sleepy A game to miss, if you can stop yourself buying it that is **D C**

instructions	65%
playability	65%
graphics	75%
value for money	55%

★ ★ ★

Golden oldies

Old favourites are given the once over for you by our panel of experts

Aces High BBC/Electron £14.95

Oasis, Alexandra Parade Weston super Mare, Avon BS23 1QT

Claimed by the publishers to be their 'best deal yet the programs in this package are better than the puns suggest There are two cassettes, each containing two card game programs All are casino style games involving an element of betting, either against the computer or against other players

The games are Blackjack Pontoon (vingt et un), Stud and Draw Poker The games play to the usual casino rules which are all fully explained in the well presented handbook

In all games of this type there are two main areas to consider The first is the quality of the graphics, which in this case are well presented and very attractive Secondly there is the speed of response to input and of display which is also very good in this case All the games follow a similar pattern of display and input but then all packs of cards look the same too

The computer is a competent player and, as the publishers take great pains to point out plays fair I still find it difficult to see the fascination in winning mythical money though! **D C**

instructions	95%
ease of use	90%
graphics	90%
value for money	90%

★ ★ ★ ★ ★

Red Attack Spectrum £5.99

Unique, 16 Thorney Lane South, Iver Bucks

A very "run of the mill" zapping game in which you steer your spacecraft from the bottom of the screen as identical alien ships weave towards you down the screen You can jump up to five levels onward at the start, but this also loses you lives, in an attempt to increase the level of excitement Speed is also variable, and movement keys can be defined

The screen display is very uninspiring monochrome ships on a white background though they are relatively flicker free That's not to say the game is easy if not But somehow, the [illegible] not add [illegible]

There are 72 different waves of aliens to conquer, but somehow I don't think you'll stick it out

If you do finally enter the hall of fame with a high score, you deserve a medal for patience

Red Attack demonstrates how Spectrum software has progressed in the last two years What would have been a viable commercial program earlier on is now barely as good as the best magazine listings As such it cannot be recommended even if it is cheaper than usual **D M**

instructions	90%
playability	95%
graphics	50%
value for money	50%

★ ★ ★

Xanadu Cottatge/ Ebony Tower 32K BBC £7.95

Alligata, 1 Orange St, Sheffield S1 4DW

The reason for the two titles is that this is a two-game package for the price of one This suggests to me that the adventure market must be fading a little for that is what these two games are

They are text only adventures with a reasonable number of locations and a full vocabulary is given for both Whilst they aren't simple, I don't think that they will tax an experienced player

They are not clones of each other and as the screen style is different I suspect that they have different authors

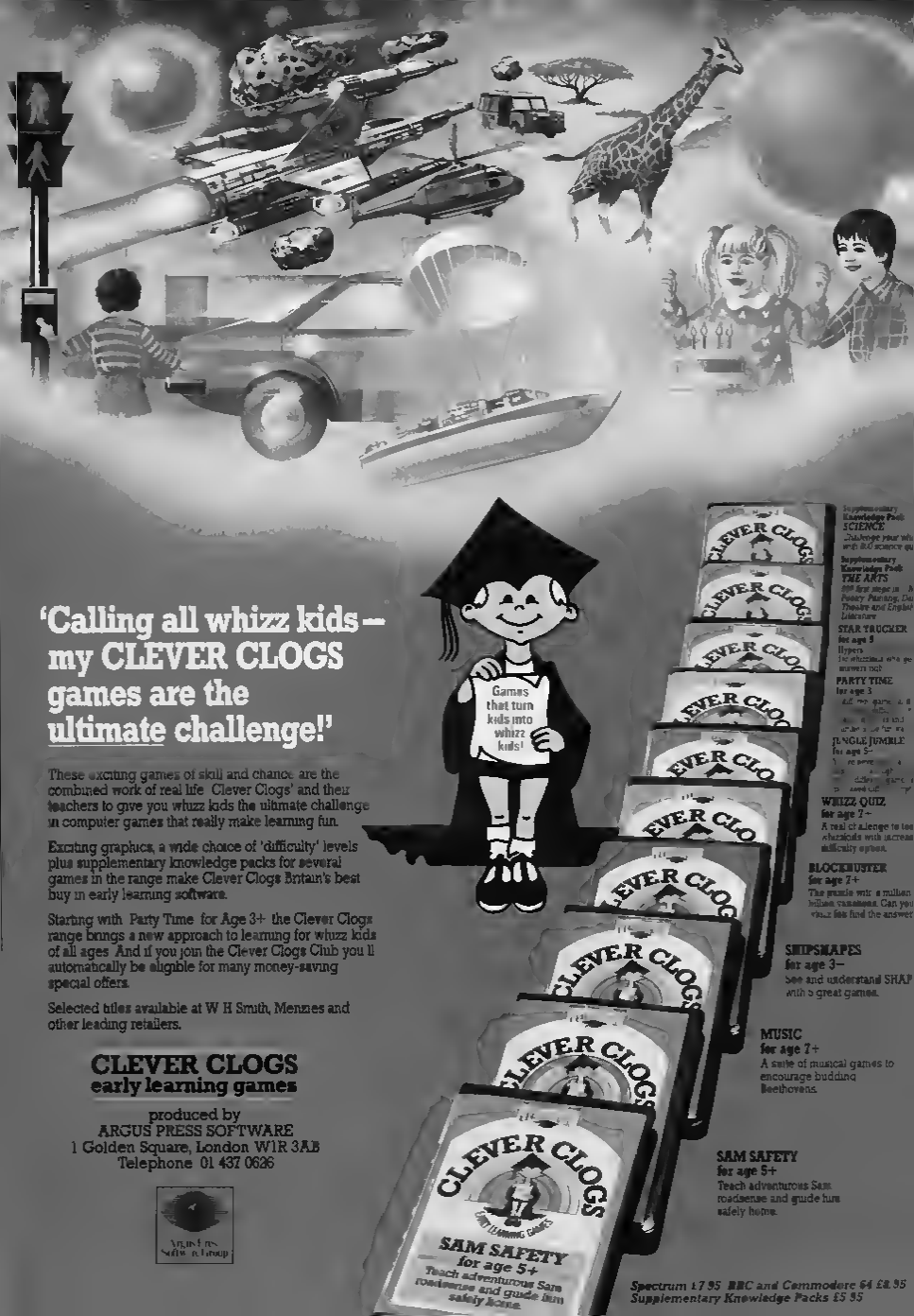
Xanadu Cottage's text is in block capitals and there is a shortened version of each description for second visits It is very simple to restart this adventure, as there is no data file to load

Ebony Tower does have a data file to load and this is a pain because it has to be loaded every time you are killed

Overall this is certainly good value for money and there is plenty to keep the player interested I haven't found the location where you 'undress' yet though! **D C**

instructions	65%
playability	90%
graphics	N/A
value for money	85%

★ ★ ★ ★



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Guaranteed: the buyer is responsible

One complex issue involving software has been getting a lot of press lately, and that is the area of guarantees I'm not sure how things go out your way, but all too often, the unwary purchaser of a new program tears the shrink-wrap paper off his new purchase to find all sorts of interesting "small print" inside the front cover of the documentation Often this small print is headed by a title similar to this "Disclaimer of all warranties and liabilities"

In general, such disclaimers go on to state that the manufacturer does not guarantee either the suitability or the merchantability of the product The exclusion of both these factors seems reasonable After all, the maker cannot and should not have to guarantee that the retail store will be able to sell the program and certainly cannot be required to guarantee that an off-the shelf program will custom fit all its purchasers' needs

Recently, however, a few industry observers have begun to notice a trend away from reasonable disclaimers to fairly heavy duty ones Some of these companies bring new meaning to the phrase caveat emptor (let the buyer beware)! Two products, both released in the last month, have issued so-called warranty disclaimers which put the responsibility for programme quality on the purchaser Perhaps it would be worthwhile to quote from one of the disclaimers The proper name of the company has been changed to avoid legal problems I have inserted parentheses for the purpose of clarity

"(The Ripoff Program) Corporation makes no warranties, either expressed or implied, with respect to this manual or with respect to the software described in this manual, its quality, performance, merchantability, or fitness for any particular purpose (Ripoff Program) software is sold or licensed 'as is' The entire risk as to its quality and performance is with the buyer Should the programs prove defective following their purchase, the buyer, assumes the cost of all necessary servicing, repair or correction, and any incidental or consequential damages" Isn't that dandy? And unsuspecting purchasers of this program would not even know the details until they took the program home and broke the seal!

Can you imagine walking into a John Lewis store, buying an appliance in a sealed carton (without looking at it first), taking it home and unpacking it, and then finding out that you were totally responsible for any defects that the appliance might have — including not doing the job for which it was specifically intended? How long do you think the department store (or any other similar business) would stay in business with such a policy?

Software companies should and must learn that it is vital to assure customers of the value of the program they purchased with their hard-earned money There is no way to do this with the aforementioned types of disclaimers The way to do it is by making a product which does what it is intended to do, by offering customer support, and then by stating that you do both It isn't all that hard, "to operate within all specifications contained in its accompanying documentation" Likewise, Broderbund states, simply put, that "This program is fully guaranteed"

The bottom line is this, and it probably is unfortunate, but one day this issue of fitness of purpose will have to be settled in court and at much expense In California, for example, there is a law which allows consumers to see and indeed obtain a copy of the guarantee on any product which costs more than $50 To the best of my knowledge, most of the software industry is out of compliance with this directive

A more immediate and practical solution is at hand, although I am pessimistic that it would ever be voluntarily adopted Software makers should print their warranties and any disclaimers on the outside of their packages so that they can be read by consumers before purchase That way we'd all know what we were getting before we got it (as it were) However as I stated above, it is far more likely that, as is too often the case, this will all be settled in the courts

Some interesting educational program packages have recently been announced for Apples, Ataris, and Commodores. Sunburst Communications, which already markets its line of educational software, has added to its range The Incredible Laboratory, designed for aged 7 years to adult, used the trial-and error method to see what combinations of chemicals will create monsters (this seems to be more games than education). Challenge Maths, for ages 6 to 11, contains three subprograms (Alien Intruder, Maths Mansion and Digitosaurus) to help kids develop fundamental maths skills, estimation and problem solving Finally, using Getting Ready to Read and Add, for ages 3 to six, allows kids to practise letter and number recognition. The program allows parents to direct their children's learning by pre-selecting which numbers and letters are to be practised and also how often These packages cost $39 95 each For more information, contact Sunburst Communications, Pleasantville, New York, NY 10570

★★★★

Something I haven't done for a while is describe some new and interesting products on the marketplace So, I will use the rest of this week's column to do just that Want to visit Studio 64? Sounds like a famous nightclub, doesn't it? Well, in reality it is a music synthesizer and recording studio progeam made to run on the Commodore 64

EnTech Software, publishers of the program, have extended the entry deadline on a promotion they have been running to push their product Their Computer Song Writing Contest deadline is now 1 December 1984

The programmer/musician who writes the best song on the Commodore 64 using Studio 64 will win $1000 plus free time inside an actual recording studio. Judging the contest will be a 10-person panel of music professionals All entries must be submitted on disc

If you would like more information about the program and/or the contest, write to Computer Song Writing Contest, P.O Box 185, Sun Valley, CA 91353, (818) 768 6646 Time to tune up!

★★★★

Tired of boring old black and white printouts, but can't afford a colour printer/plotter? Sharp Electronics may just have contributed to the solution of your problem with its new CE-515P four-colour plotter

The unit uses black, red, green and red pens, each of which can be programmed separately The minimum pen width is 0 2 mm for excellent detail When printing alphabetical characters (in four step by six step mode), the characters would be printed 0 8 by 1 2 mm The unit can handle paper up to 8 5 inches wide and can plot on paper down to the size of the average postcard (custom art work on mailings!) It supports both EIA RS-232 and Centronics interfaces and therefore can be driven by just about any common microcomputer

It has certain built-in commands too, such as circle, paint, and axis commands, all of which can be programmed and addressed from BASIC

As if that's not enough, Softkey's Keychart is bundled in with the plotter This program is designed for use in graphics production It is menu-driven and uses a fill in-the blanks format to produce different types and sizes of charts Sharp has consulted any number of software publishers so that the plotter can be commonly supported Best of all, this amazing machine carries a suggested retail list price of a mere $399!

For more details, contact your local Sharp dealer or write to or phone Sharp Electronics Corp , Systems Division, 10 Sharp Plaza, Paramus NJ 07652, (201) 265-5600

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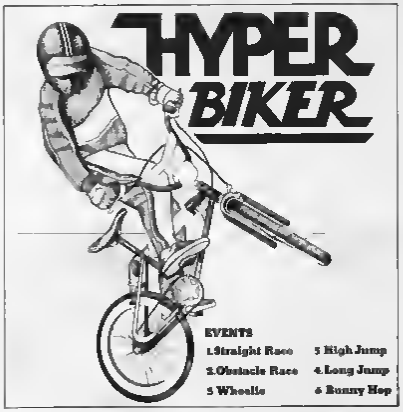

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cascade

Cascade Games Ltd
Suite 4, 1-3 Haywra Crescent, Harrogate, North Yorkshire, HG1 5BG, England
Telephone (0423) 504526

Wall Street c

See the greenbacks tumble in this game by Sean Conway. We're talking big bucks

How it works

- **1139** POKE black screen and border colour
- **1140** DIM four sets of variables
- **1144** initialise variables
- **1145** calculate random trend
- **1150** read stock value data
- **1155-1163** initial trend, value of stock, stock owned, cash
- **1166-1176** display stock value table
- **1177-1188** calculate stock average and change
- **1197** check to end or continue
- **1201-1202** INPUT stock purchases
- **1210** purchases and sales total
- **1219** stock oversold message
- **1225** check purchase with cash
- **1230** new holdings
- **1236** end of day
- **1255-1273** calculate new stock values, random number of days to increase or decrease stock values
- **1275-1333** main loop to change stock values and calculate the individual changes
- **1335-1339** change sign of trend after 11 days
- **1350-1358** change sign and length of trend randomly
- **1364-1370** end routine
- **2000-2090** display cash and stock assets subroutine
- **2500-2640** main display subroutine giving stock name, value, value of stock owned and stock price change
- **3000-3070** stock owned table subroutine
- **3100** data for initial share prices
- **4000-4004** press space subroutine

Do you fancy a flutter on the stock market but don't have enough cash to spare? Here's the answer to your daydreams — a stock exchange game you can play in the comfort of your own home without losing any money

Wall Street is a stock market simulation for the unexpanded VIC 20. It consists of two parts The first is an outline of the game and instructions and the second part comprises the main program

You can deal in five stocks red glue, clear soap, soft drinks, toothpaste and magazines You start with £10,000 cash and your intention is to double this by buying and selling stock at the right time As in real life, market trends can change suddenly and unexpectedly, and you could find yourself losing your shirt

On running the game you are given the current share prices followed by the exchange average Then you'll see a statement of current assets, cash and stock

Now make your transactions If you want to sell stock, make the number to be sold a negative When the day's trading ends you are given a status report of the number of shares held, the present value of your holdings and the change in value of each stock since close of business the previous day

You need not type in part 1 if you don't require it But it may prove useful in the future when you decide to run previously saved programs

Your gains aren't all yours you have to pay 2 5% to your broker on the total value of your stock holdings Good luck keep your eyes open and your wits about you.

Variables

- **M** total cash assets
- **S9** total stock assets
- **T** total assets
- **C1** total temporary cash assets
- **P1** purchases for day
- **S1** sales for day
- **S2** total value of transactions
- **B** fee for broker
- **I** stock
- **C(I)** change in value of stock
- **S(I)** value per share of stock
- **P(I)** stock owned
- **T(I)** transaction in stock
- **A2, A3, A4** London stock exchange average
- **T9** market trend
- **S8** sign of market trend (+ or −)
- **I1** duration of market trend
- **C9** check to see if new cycle is possible
- **L1, L3** random large change in stock value
- **L3, L4** stocks to change by L5
- **L5** large change
- **C5** small change (less than £1)
- **D1, D2** change in stock value after random number of days

```
8 POKE36879,8
9 REM [CLR][CRD10]
10 PRINT"[illegible]"
12 FORX=1TO25
13 REM[WHT][CRR5]
14 PRINT"[illegible]WALL STREET"
15 PRINT FORT=1TO250 NEXTT
16 NEXTX
18 FORX=1TO11 PRINT PRINT
20 FORT=1TO250 NEXTT
22 NEXTX
24 FORX=1TO1000 NEXTX
25 REM[CRR10][RED][RON]
26 PRINT"[illegible]BY"
27 REM[CRD][CRR5][YEL][RON]
28 PRINT"[illegible]SEAN CONWAY"
30 FORX=1TO2500 NEXT
32 POKE36878,15
33 READP
34 IFP=-1THEN41
35 READD
36 POKE36875,P
37 FORN=1TOD NEXTN
38 POKE36875,0
39 FORN=1TO20 NEXTN
40 GOTO33
41 POKE36875,0
43 POKE36879,124
44 REM[CLR][CRD][BLK][CRR5]
45 PRINT"[illegible]INSTRUCTIONS"
46 PRINT"[illegible]"
```

Hints on conversion

This program should convert easily to most computers All that will need changing is the screen display layout, which is suited for the VIC's small screen

POKEs in the program are as follows

- POKE 36879,8 gives black screen and border
- POKE 36878 volume control
- POKE 36876 soprano voice

Control characters to remember when converting are as follows (all in reverse)

- **Q** cursor down a line
- **J** cursor right a space
- **E** print in white
- **£** print in red
- **horizontal arrow** print in blue
- **P1** print in yellow
- **heart** clear screen
- **R** reverse mode on
- **_** reverse mode off

ash or cash?

```
40 PRINT"■■THIS IS A STOCK MARKETSIMULATION WHERE WITH-OUT RISKING ANY MONEY"
49 PRINT"YOU CAN FOLLOW UP YOURPREDICTIONS ON FUTURE MARKET TRENDS."
50 PRINT"■■YOU START WITH A    TOTAL OF £10,000 WITH WHICH YOU CAN BUY "
52 PRINT"STUCK IN FIVE COMMODI-TIES I.E. PED GLUE,   CLEAR SOAP,SOFT DRINKS",
54 PRINT",TOOTHPASTE,MAGAZINES.";
55 GOSUB2000
57 PRINT"■J■■ALL INFORMATION YOU NEED AS REGARDS STOCK VALUE,CASH REMAINING,"
58 PRINT"NO.OF EACH STOCK OWNEDETC. WILL BE DISPLAYEDIN TABLE FORM IN THE"
59 PRINT"MAIN PROGRAM"
60 PRINT"■■WHEN ASKED TO BUY   STOCK INPUT THE NO.    REQUIRED FOLLOWED BY"
61 PRINT"RETURN. IF NO STOCK ISREQUIRED TYPE '0'. IF YOU WISH TO SELL STOCK",
62 PRINT"INPUT THE NO. PRECEED-ED BY A MINUS. YOU CANNOW SIT BACK AND WATCH",
63 PRINT"AS YOU EITNER BECOME  RICH OR LOSE YOUR     SHIRT."
64 GOSUB2000
65 PRINT"■J■■A FEE OF 2.5% ON ALLSTOCK HOLDINGS WILL   BE DEDUCTED BY THE "
66 PRINT"BROKER AT THE END OF  EACH DAY"
67 PRINT"■WHEN FINISHED WITH THEINSTRUCTIONS TYPE NEW AND RETURN"
68 PRINT"■■■■NOW PRESS SHIFT AND  RUN/STOP TO LOAD PART TWO."
69 END
1000 DATA225,250,225,250,232,1000,225,250,225,250,225,250,225,250,221
1010 DATA1000,225,250,225,1000,225,200,223,200,225,200,223,200,225,200,221,200
1020 DATA227,250,225,250,223,250,221,200,227,250,225,250,221,1000,-1
2000 PRINT"■■■■PRESS 'SPACE'"
2010 GETA$:IFA$<>" "THEN2010
2020 RETURN
```

```
1139 PRINT"J" POKE 36879,0
1140 DIMS(5),P(5),T(5),C(5)
1144 LETS2=0:LETX1=0:LETD1=0:LETD2=0:LETL1=0:LETL2=0
1145 LETT9=INT((RND(1)*10)+.5)/100
1150 READS(1),S(2),S(3),S(4),S(5)
1155 LETI1=INT(5*RND(1)+1)
1156 IFRND(1)>.5THEN1150
1157 LETT9=-T9
1158 GOSUB1255
1161 FORI=1TO5:LETP(I)=0:LETT(I)=0
1163 NEXTI:LETM=10000
1166 PRINT"J■■■STOCK■■■■■■■■PRICE"
1167 PRINT"■■■■■■■■
```

```
1201 PRINT"■■■YOUR DEALINGS IN  -"
1202 INPUT"■■PG",T(1) INPUT"CS",T(2) INPUT"SD",T(3) INPUT"TP",T(4) INPUT"MZ",T(
)
1210 LETP1=0 LETS1=0
1212 FORI=1TO5
1213 LETT(I)=INT(T(I)+.5)
1214 IFT(I)<=0THEN1217
1215 LETP1=P1+T(I)*S(I) GOTO1220
1216 GOTO1220
1217 LETS1=S1-T(I)*S(I)
1218 IF-T(I)<=P(I)THEN1220
1219 PPINT"YOU HAVE OVERSOLD A   STOCK" FORX=1TO1000 NEXTX GOTO1201
1220 NEXTI
1222 LETS2=P1+S1 LETB =INT(2.5*S2+.5)/100 LETC1=M-P1-B +S1
1225 IFC1>=0THEN1229
1226 PRINT"YOU HAVE SPENT £",-C1"MORE THAN YOU HAVE."
1227 GOTO1200
1229 LETM=C1 FORI=1TO5
1230 LETP(I)=P(I)+T(I) NEXTI GOSUB1255
1236 PRINT"■■■END OF DAY'S DEALING ■" FORX=1TO3000 NEXTX GOSUB3000
1237 GOSUB2500 GOSUB4000
1252 FORX=1TO500 NEXT LETX1=1 PRINT GOTO1166
1255 IFD1>0THEN1263
1257 LETL3=INT(5*RND(1)+1) LETD1=INT(5*RND(1)+1) L1=1
1263 IFD2>0THEN1271
1265 LETL4=INT(5*RND(1)+1) LETD2=INT(5*RND(1)+1) LETL2=1
1271 LETD1=D1-1 LETD2=D2-1
1275 FORI=1TO5 LETC5=RND(1)
1279 IFC5>.25THEN1285
1281 LETC5=.25 GOTO1299
1285 IFC5>.5THEN1291
1287 LETC5=.50 GOTO1299
1291 IFC5>.75 THEN1297
1293 LETC5=.75 GOTO1299
1297 LETC5=0
1299 LETL5=0
1301 IFL1<1THEN1309
1303 IFINT(L3+.5)<>INT(I+.5)THEN1309
1305 LETL5=10 LETL1=0
1309 IFL2<1THEN1314
1311 IFINT(L4+.5)<>INT(I+.5)THEN1314
1313 LETL5=L5-10 LETL2=0
1314 LET U1=INT(T9*S(I))
1315 LET U2=INT(3-6*RND(1)+.5)
1316 LET C(I)=U1+C5+U2+L5
1317 LETC(I)=INT(T9*S(I))+C5+INT(3-6*RND(1)+.5)+L5
1319 LETC(I)=INT(100*C(I)+.5)/100
1321 LETS(I)=S(I)+C(I)
1323 IFS(I)>0THEN1331
1325 LETC(I)=0 LETS(I)=0 GOTO1333
1331 LETS(I)=INT(100*S(I)+.5)/100
1333 NEXTI
1335 LETI1=I1-1
1337 IFI1<1THEN1350
1339 RETURN
1350 LETI1=INT(5   *RND(1)+1)
1352 LETT9=INT(RND(1)*10+.5)/100
1354 LETS8=RND(1)
1356 IFS8<=.5THEN1358
1357 LETT9=-T9
1358 RETURN
1364 PRINT"■■■■■■■■■■■■WALL STREET■" PPINT"■■■BROUGNT TO YOU BY"
1366 PRINT"■■■■■■■■■■SEAN CONWAY"
1368 PRINT"■■■■I NOPE YOU ENJOYED IT"
1370 END
```

```
2000 PRINT"[redacted] ASSETS ="
2010 PRINT"[redacted]"
2020 LETS9=INT(100*S9+.5)/100
2030 PRINT"[redacted]TOCK  £",S9
2040 LETM=INT(100*M+.5)/100
2050 PRINT"CASH   £",M
2060 LETT=INT(100*T+.5)/100
2070 PRINT."[redacted]"
2080 PRINT"[redacted]TOTAL  £",T
2090 FORV=1TO5000 NEXT RETURN
2500 PRINT"[redacted]ETOCK","[redacted]RICE"
2510 PRINT"[redacted]","[redacted]"
2520 PRINT"[redacted]P.GLUE","[redacted]"S(1)
2530 PRINT"[redacted]C.SOAP","[redacted]"S(2)
```

```
2540 PRINT"[redacted]2.DRINK","[redacted]"S(3)
2550 PRINT"[redacted]T PASTE","[redacted]"S(4)
2560 PRINT"[redacted]M ZINES","[redacted]"S(5)
2570 PRINT"[redacted]P/VALUE","[redacted]CHANGE"
2580 PRINT"[redacted]","[redacted]"
2590 PRINT"[redacted]"S(1)*P(1),"[redacted]"C(1)
2600 PRINT"[redacted]"S(2)*P(2),"[redacted]"C(2)
2610 PRINT"[redacted]"S(3)*P(3),"[redacted]"C(3)
2620 PRINT"[redacted]"S(4)*P(4),"[redacted]"C(4)
2630 PRINT"[redacted]"S(5)*P(5),"[redacted]"C(5)
2640 RETURN
3000 PRINT"[redacted]ETOCK","[redacted]OWNED"
3010 PRINT"[redacted]","[redacted]"
```

```
3020 PRINT"[redacted]P.GLUE",P(1) PRINT"C.SOAPS",P(2) PRINT"S.DRINKS",P(3) PRINT"T PAST
",P(4) PRINT"M ZINES",P(5)
3070 FORX=1TO5000 NEXT RETURN
3100 DATA140,160,75,100,125
4000 PRINT"[redacted]PRESS 'SPACE'[redacted]"
4001 GETA$ IFA$<>" "ANDA$<>"N"THEN4001
4002 POKE36878,15 POKE36876,245 FORX=1TO100 NEXTX POKE36876,0
4003 IFA$="N"THEN1364
4004 IFA$=" "THENRETURN
```


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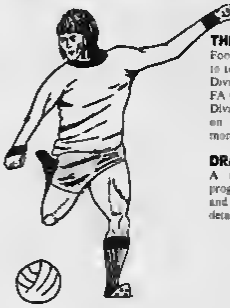

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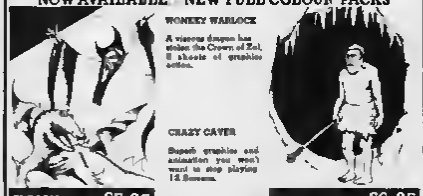

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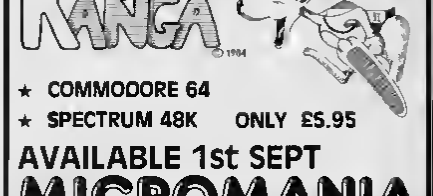

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The Journey
48K Spectrum
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Temptation, 27 Cinque Ports St
Rye E Sussex

The Journey is an adventure with graphics, but only now and then. One could not describe it as being fully illustrated of the 50 or so locations, few are pictured in the simple style we have come to expect on the Spectrum.

Your quest is set in the lands of the Black Warlock whose Guardians are not very friendly - picking your way gingerly North to seek out the White Ship of the elves. You must defeat the Guardians, and other nasties, in order to make your way.

If you gain their respect, you may get some help from the elf, the warrior, and the wizard. All these characters have an independent life of their own, reacting to you as they see fit!

Just to make matters more interesting, the whole land is littered with coded messages. Examine the objects carefully, and you might find a clue! Fail to act quickly, and you're dead!

Descriptions of locations are adequate, if not inspired and the input interpreter simple but effective. Response from the Spectrum does seem slow.

You certainly won't solve this one all in one go! It's complex and tantalising.

D M

instructions	100%
playability	90%
graphics	60%
value for money	87%

★ ★ ★ ★

Gem Grabber
TI-99/4A £5

Stainless 10 Alstone Rd, Stockport, Cheshire

As the title suggests, you take the jewels and run, but running is not too easy when you happen to be deep under the ground.

The screen shows a series of subterranean passageways surrounded by solid ground and crossed, in places, by walls of impenetrable rock. Randomly located in the ground are other rocks and explosives.

Using a limited supply of TNT you must bore a route through the ground into the passageways where five jewels have been placed.

Obviously you must avoid moving into the explosives, but passing directly beneath an object proves equally hazardous, as it will fall and crush you.

Since your man has only one life, after a brief rendering of "The Death March", the score is displayed and you are left to start again. Control of movement is from the keyboard.

When all the gems have been collected a bonus jewel appears. If you can take this and make your way to the exit successfully a bonus screen is awarded.

Here you gather gems once more whilst avoiding laser shots. The jewels have been made even less accessible.

J W

instructions	70%
playability	60%
graphics	50%
value for money	80%

★ ★ ★

Decimals
VIC-20 + 16K
£9.2S

Chalksoft, 37 Willowslea Rd
Worcester WR3 7QF

This is a purely teaching program with no entertainment features. Its aims are to teach the principles of decimals to the nine to 14 year age group and to monitor their progress.

This includes the four basic arithmetical operations and the arrangement of numbers in ascending or descending order. There are graded tests to assess progress.

In creating this program the author has devised the most boring thing since a party political broadcast. Had it been given to a class of children by a real teacher the class would have fallen asleep or rioted.

The programmer seems to have forgotten that even the under nines use decimals every-day and that basic knowledge should be built upon.

No comparisons with fractions were given, which, combined with illustrations would have been useful.

In fact, no illustrations were used at all. Instead numbers were put on the screen and the user was told to write the examples in their note books.

This last point negates the value of a computer since a teacher could do this with 20 plus children while a computer only does it with 2 or 3.

In all a poor program, which at it's best is a good, albeit expensive, cure for insomnia.

M W

instructions	80%
ease of use	50%
display	20%
value for money	25%

★ ★

The choice is yours

More reviews for you to read, giving you the chance to pick your likely favourite

Custard Pie Fight
32K BBC £4.95

Comsoft, 7 Roman Drive Leeds

This game involves, as the name suggests, the throwing of custard pies. The scene is the kitchen and all the doors and units are displayed at the top of the screen.

You have an unending supply of pies to throw at your opponent who can be another human being or the computer if you are silly enough.

There are nine different speeds but both pies and humans to move at and you can disable sound if you so desire. When a pie hits one of the players he just falls over, I do think a little more of a splattering of the pie would have been nice.

Another criticism is that there is no provision for joysticks in the program. This is a real pity as I think this sort of program is more for the younger player eg my five year old, than the Arcade Freak — and they handle joysticks better. A nicely done, if average game.

D.C

instructions	65%
playability	60%
graphics	70%
value for money	60%

★ ★ ★

Scram 20
VIC-20 £5.95

Artic Computing, Main St, Brandesburton, Driffield

This is a version of the old favourite Scramble. To those of you who don't know the game it involves flying a spaceship over terrain which moves from right to left.

In the first phase the surface is littered with missiles, fuel dumps and other items.

To keep your rocket's fuel stocks up you must bomb the fuel dumps. Not unsurprisingly the missiles are fired at you and if they hit your ship the result is undrivable. Subsequent phases see you varying terrain and different hazards to avoid.

You are equipped with forward firing lasers and bombs for protection. It is possible using either joysticks or keyboard, to move the ship in the normal four directions.

The graphics are to a fair standard and movement is tolerably smooth. I found the game difficult to play with everything happening at a frantic pace. The second phase was particularly nasty and I didn't manage to progress beyond that point.

This game is very addictive and should provide hours of harmless fun. I've seen one or two versions of scramble on the VIC and this one is as good as the rest.

instructions	75%
ease of use	75%
graphics	70%
value for money	70%

★ ★ ★

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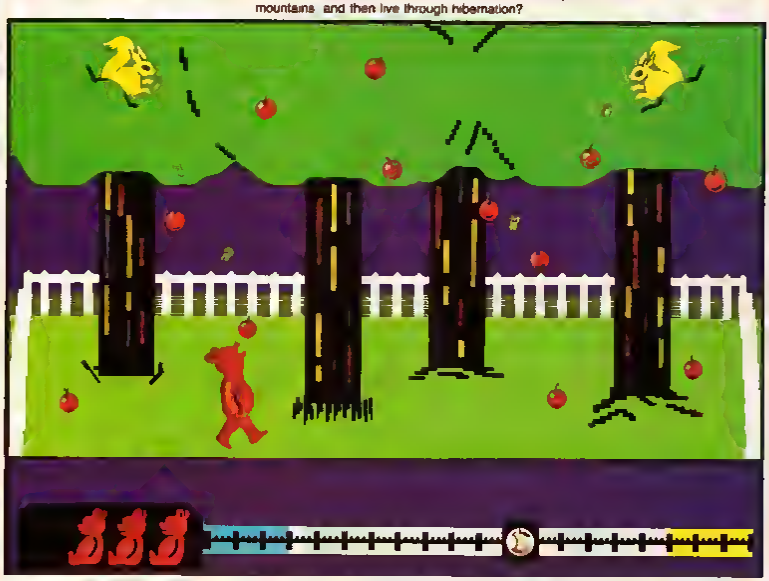

(Graphics shown above are as on Spectrum 48k version)

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Urban planning

I would like to say that C Palmer was wrong in his letter in HCW 77 when he said that in Urban Upstart you drink the lager to get out of the police station What you should do is go south from the cell and put WAIT, the sergeant will answer the phone and you will slip out without having to go to hospital You will not lose points for not having the lager

Could someone tell me how to get past the airport official (also in Urban Upstart)? I am also having trouble finding the magic word to say in the sorcerer's workshop in the Golden Baton Can anyone help?

David Hope, Manchester

Beat that

I am writing in reply to the letter from Michael Anthony (issue 76)

On the 21st June 1984 I beat Sabre Wulf with a score as small as 90,000 points As soon as I did that I wrote to Ultimate with the date and score and received a reply of congratulations

But on the 26th June 1984 I scored 325,150 points and 100 per cent of the adventure completed As of yet I cannot gain 100 per cent on Ant Attac, my highest is 99 per cent

Antony Crawford, Warrington

Sound routines

After reading the letters page in issue 74 of HCW I tried out Nigel Beeden's 'Sound Advice' I tried farther experiments and came up with a couple of pleasant and unusual sub routines

```
10  FOR Y = 110 to 1010
    STEP 100
20  CALL SOUND (250,Y,
    0,Y+11,0,Y+12,0)
30  CALL SOUND (-250,
    1120-Y,0,1121-Y,0,1122
    -Y,0)
40  CALL SOUND (-250,Y,
    0,Y+20,0,Y+25,0)
50  NEXT Y

10  FOR H=-2 TO -7 STEP
    -1
20  FOR T=1 TO 10
30  CALL SOUND (10,H,
    T)
40  CALL SOUND (10,
    H-1,T)
50  CALL SOUND (10,
    H+1,T)
60  NEXT T
70  NEXT H
```

The following program vaguely prints out the TI logo

```
10  CALL CLEAR
20  CALL CHAR (33,
    "3E3E3E3F3F3EFC7
    F")
30  CALL CHAR (64,
    "000040005E4F4F5F")
40  CALL CHAR (35,
    "5F5F1E8CF0F0F830")
50  CALL CHAR (38,
    "3F3E3303010100000")
60  PRINT "  "@
    $#
70  GOTO 70
```

A Brewster, Rochester

Ghost town tips

In reply to Sally Parker's letter (HCW 77) about Ghost Town, I can help her

First of all you will need the compass and the horseshoe These will enable you to get into jail Then get the stetson hat and shake it A key will fall out enabling you to get through the locked door inside the jail

Once inside you will find a hammer With the hammer, the horseshoe and the nails (the latter being found in a storeroom behind the horse) you can shoe the horse

To open the safe you will need gunpowder made up of the yellow powder in the field, the white crystals in the manure and the Sage brush charcoal Fill in the empty keg with the gunpowder and put it in the telegraph office Then move the safe and splice the wires Next go to the line shack and type PRESS KEY

On the subject of adventure games I have finished Pirate and Ghost Town but I am stuck in Mystery Fun House Pyramid of Doom, Golden Voyage and Savage Island 1 Does anyone know where to find the third small stone? I have found one small stone by the cave and the other in the passage Can anyone help me?

Ian Thurley, Bourne, Lincolnshire

Code confusion

I am a fanatic of computer games and was disappointed when I could not get the chart busting game Jet Set Willy to load into my Spectrum computer I tried on every volume but it still would not work

Eventually I got it to load in and it then asked me to find a code for room NI I tried but after the second time the machine returned to the beginning and I had to load it again The same thing still continued to happen

I would be grateful if someone could help with this problem and perhaps tell me what the codes are for all the different rooms

M Lungley, Eastbourne

Pen pal plea

I would first of all like to congratulate HCW for supporting the TI-99/4A Well done!

I would like a computer pen pal so we can write to each other and swap our own games for the TI 99/4A and send news to each other I have about 45 games for the Texas and I would like a pal with about 10-100 games

F Clarke, 2 Sawyers Road, Little Totham, Maldon, Essex

Poking fun

I wrote a program to look for some good POKEs for me to use in a program Whilst doing this I found a number of POKEs which together made a simple pattern plus it coloured it all and flashed it in a simple program I modified it so that it would go through all the colours in the middle of the screen

```
10  FOR A = 15360 TO
    15300
20  POKE A,203
30  NEXT A
40  FOR B = 1 TO 255
50  POKE 23022,B
60  POKE 23054,B
70  POKE 23150,B
80  PAUSE 5
90  NEXT B
```

You could add sound but it would take the pattern longer to finish

J L Holdsworth, Withernsea

Screen scene

I get your magazine every week without fail, and think it is tops for programs and software reviews etc

Having read a letter from Andy Hopkins in HCW 75 which shows how to expand the screen I have come up with the following program which may be very useful as a sub-routine on the VIC 20, it makes the screen seem to open and close

```
10  PRINT "CLR ":POKE
    36879,24
20  FOR t = 0 to 22
30  POKE 36864, 12+ T
40  POKE 36865, 38 + T
50  POKE 36866, 38 + T
60  POKE 36867, 38 + T
70  NEXT T
80  FOR T = 22t00 step -1
90  POKE 36864, 12 + T
100 POKE 36865, 38 + T
110 POKE 36866, 59 T
120 POKE 36867, 174 - T
    * 2
130 NEXT T
140 GOTO 10
```

You can add sound too by adding the following

```
5  POKE 36878, 15
65 POKE 36477, 200 + T
125 POKE 36477, 200 + T
```

Bearing in mind what Andy Hopkins said about the positions of the screens, you should be able to achieve some good effects

Ian Longdon, Leicestershire

Impossible mission

I own a Commodore VIC 20 and have recently bought The Count and Mission Impossible Unfortunately I have had great difficulty with both of these games When playing Mission Impossible I keep coming up against locked doors with cameras attached and a voice telling me I don't have enough authorization

On The Count I have found the passage behind Dracula's portrait but have no torch so cannot enter because of the darkness, has anyone any tips on these games?

Also as a novice programmer frustrated by the lack of real information in my user manual I have found the book Getting Started on Your Commodore/VIC-20 by Futura a great help (priced at £2.95) The title of the book is misleading as it deals with many of the more complex functions available

S Brooks, Woking

Adventure aid

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Now all you true believers of the Hulk adventure, I want some answers — how do you get past the chief examiner and how do you find Antman and Dr Strange?

William Thompson, Southport

Jack's axe

In reply to Philip Rawlin's letter (HCW 75) the way to get round the first sheet of Jack and the Beanstalk is to go to the left and pick up the axe then to make your way up the beanstalk I would like to know if anyone has beaten the computer at the 1,500m on Micro Olympics

I own a Sinclair Spectrum 48K

Tony Davidson, Sunderland

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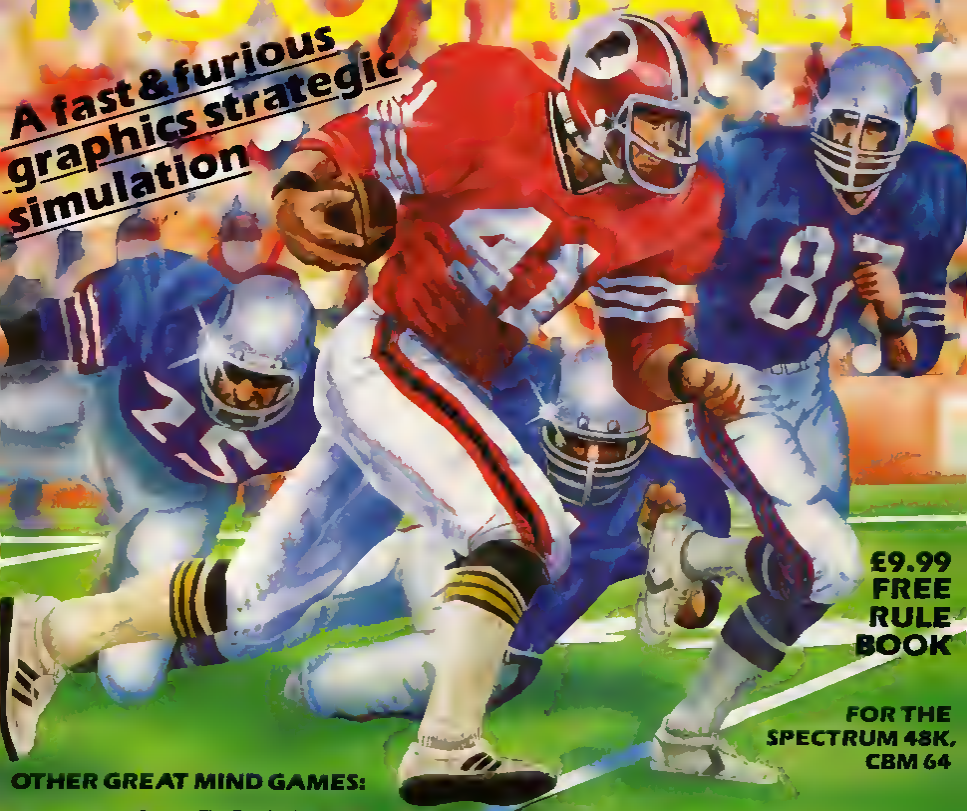

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